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ABSTRACT

In order to provide the Florida Migratory Child Compensatory Education Program with information required for determining whether and to what extent the educational needs of migrant children were being met by the present educational programs, eight study tasks were implemented. These tasks involved looking at the changes and characteristics of the Florida migrant population, students' needs, subgroup differences, ethnic group differences, funding resources for migrant families, program objectives, the implementation of migrant programs, and changes in needs of migrant children in 1980. The comprehensive findings provided a foundation on which to base a coordinated, multifaceted approach to the addressing of the problems of Florida's migrant students. It was recommended that these findings be utilized as the basis for the formulation of a 5-Year Multi-Intervention Action Plan to meet the needs of children of migratory agricultural workers, and that the State Department of Education assume the major responsibility for providing the leadership for its formulation and implementation. This report presents a description of the methodology used in addressing each task and a summary of the salient findings and recommendations. Special emphasis is given to three of the tasks by providing a general overview of the needs of migrant students as a group, their needs according to subgroup classification (nonmigrant, former migrant, and current migrant), and the ethnic differences and characteristics. (NQ)

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AN EDUCATIONAL NEEDS ASSESSMENT FOR THE CHILDREN OF FLORIDA'S MIGRATORY AGRICULTURAL WORKERS

VOLUME I
EXECUTIVE SUMMARY
A Summary of Findings and Recommendations

Prepared By
D. A. LEWIS ASSOCIATES, INC.
FOR THE STATE OF FLORIDA DEPARTMENT OF EDUCATION UNDER
CONTRACT NUMBER DOE-760-065

APRIL 1, 1976

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David A. Lewis
President

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EXECUTIVE SUMMARY

Purpose

Under contract with the Florida State Department of Education, D. A. Lewis Associates, Inc., and its subcontractor, IBEX, Inc., designed and implemented, during a five month period (November 5, 1975, to April 1, 1976) an educational needs assessment for migrant students in Florida in order to provide to the Florida Migratory Child Compensatory Education Program information required for determining whether and to what extent the educational needs of children of migrant families in Florida were being met by the present educational programs.

To accomplish the objectives the following study tasks were implemented:

- Task 1: to determine (a) what changes in the characteristics of the Florida migrant worker population have occurred during the period 1960-1975, (b) what changes in worker characteristics can be anticipated by 1980 and what implications the anticipated changes have for future educational services to migrant children.

- Task 2: to determine (a) what identifiable subpopulations of migrant children exist in Florida, and (b) in what ways the educational needs of these subpopulations differ.

- Task 3: to determine in what respects the educational needs of the Florida migrant students (by subpopulations) coincide with those of the nonmigratory student population and in what ways the needs of migrant students are unique.

- Task 4: to determine what public financial resources are being expended in Florida for the purposes of aiding children of migrant families.

- Task 5: to determine (a) if public objectives exist for the program(s) funded by each financial resource are being designed to aid the migrant family, (b) whether these objectives are stated as to allow an asssessment of program results, and (c) if not so stated, how the objectives should be restated to allow such assessment.

- Task 6: to determine with respect to Federally funded programs designed to aid only the migrant family (a) the degree to which the planned (intended) program activities are implemented, and (b) in cases where disparity between intended and actual program activities exist, to describe the changes required by law.

- Task 7: to determine (a) the current needs (including educational needs) of migrant children, (b) which of these needs are critical and what priority should be assigned to each need, (c) the degree to which these needs are being met by current programs, and (d) how these programs may be revised to better meet the needs.

- Task 8: to determine in what ways the educational needs of migrant children are likely to differ in 1980 from current needs.

Executive Summary Organization

The Executive Summary has been organized according to each of the study tasks with the exception of task 7 which is included in tasks 2 and 3 because of its similarity. Each Summary includes a description of the methodology employed in addressing the purpose of the task and a summation of the salient findings. Special emphasis was given to tasks 2, 3, and 7 by providing a general overview of the needs of migrant students as a group, their needs according to subgroup classification (nonmigrant, former migrant, and current migrant), and the ethnic differences and characteristics.

CHANGES AND CHARACTERISTICS OF THE FLORIDA MIGRANT POPULATION (Task 1)

Methodology

While simple in its initial conceptualization, task 1 was highly complex. As such, a number of separate, distinct methodologies were required to properly address the various aspects of the task. Four basic approaches were utilized. These approaches were:

1. Pure research - Some of the subtasks lent themselves to a pure research approach (basic data collection and analysis from existing sources). The areas in which this was utilized were Technological Change, Political and Environmental Factors, and the preliminary description of the migrant farmworker population.

2. Survey research - In an effort to fill some of the data gaps discovered during the early work on this task, a series of three surveys was designed and implemented. The surveys developed were the Migrant Workers, Crew Leader, and School District Questionnaires and were designed to collect specific information concerning migrant farmworkers and their children. The data collected were used to both describe the population and to serve as input to the following two approaches.

3. Cohort survival methodology (and the Adjusted Regression Projection Technique variant) - As a basis for making statements about the composition of the population and especially about school enrollment in 1980, data collected were projected to that year using a standard projection technique.

4. Multivariate regression - An extremely interesting and informative substudy revolved around the prediction of migrant farmworker movements in the United States. In performing this analysis, a series of factors which were believed to have an impact on migrant farmworker movement were quantified and used as input to a multivariate regression model. These data were then regressed against the percent of migrant farmworkers found in various agricultural states at a given point in time to identify the major causal factors whereat.

Summary

Among the major findings of task 1 are:

- There has been a significant shift in the racial/ethnic composition of the migrant farmworker population. While once predominantly Black, there has been a very definite increase in the number of Mexican-Americans working in migrant agriculture to the point where Mexican-American workers are now in the majority. The implications of this change in the composition of the population may be seen in a number of the other major findings identified below. (Vol. II, Sec. I, Chap. 2).

- A significant increase in family size, especially in the number of children per worker has been observed. The old "rules of thumb" must be discarded and replaced with the data that has been generated by this study. (Vol. II, Sec. I, Chap. 2).

- The average age of workers has decreased in recent years as older workers have settled-out and have been replaced by younger workers. (Vol. II, Sec. I, Chap. 2).

- In the past, a majority of migrant workers travelled as crew members. This is not the case today, with workers travelling either alone or in family groups from site to site. (Vol. II, Sec. I, Chap. 2).

- Educational levels for migrant workers remain appallingly low. While the average level of education for each racial/ethnic group has risen over the past decade, the overall average has not as a result of the shift in the composition of the work force. (Vol. II, Sec. I, Chap. 2).

- The incidence of property ownership has decreased markedly in recent years. Only a small fraction of the migrant farmworkers own farms, land, or houses in contrast to previous data which indicated that a majority were property owners. (Vol. II, Sec. I, Chap. 2).

- The majority of those interviewed indicated that they planned to remain in migrant agriculture. The reasons for this are varied from an enjoyment of the life style to a perceived lack of alternative opportunities. The expectation about remaining in migrant agriculture has an impact on all actions of the farmworkers and must be remembered when attempting to meet their needs. (Vol. II, Sec. I, Chap. 2).

- The migrant farmworker appears to have the same approach to economic life as is expected from middle class society. Examples of this are:

1. Variations in wage rate, growth in agricultural production, and distance explain a vast majority of migrant farmworker movement from state to state.

2. Migrant workers state that the quantity of work and the wage rate are the major factors which they use in determining which state to work in.

3. The major factors which would cause migrant workers to settle out are good job opportunities outside of farming and good job opportunities in farming, not the chance for welfare services. (Vol. II, Sec. I, Chap. 6).

- There has been a significant increase in prekindergarten, kindergarten, and high school enrollments in recent years in both relative and absolute amounts. This trend has been projected to continue well into the near term future. (Vol. II, Sec. I, Chap. 5).

- There is a very low incidence of the identification of handicapped students by school districts. When handicapped students are identified, a vast majority are served with special programs to meet their needs. (Vol. II, Sec. I, Chap. 5).

- Health problems are not reported to be a common problem by school districts, but where they are reported, the health problems tend to be severe. (Vol. II, Sec. I, Chap. 5).

STUDENTS' NEEDS ASSESSMENT
(Tasks 2, 3, and 7)

Methodology

This needs assessment focused on defining the needs of "current" and "former" migrant students. Current migrant students are members of families currently classified as migrant farmworkers while former migrant students are members of families who have worked as migrant farmworkers within the immediately preceding five-year period. A "need" is operationally defined as a difference in performance level between migrant students (current or former) and nonmigrant students. This implies that the greater the difference in performance level the greater the need. Because of the fact that the nonmigrant students in this study generally came from the same schools as the migrant students and, consequently, on the average are socioeconomically more disadvantaged than the typical middle-class student, the findings most probably underestimate the needs of migrant students.

Eleven Florida counties participated in the study. Approximately 5,500 students in seventy-four schools were tested during the first two weeks of December 1975. The counties were selected on the basis of total number of migrant students, racial composition of the migrant population in the county and urban/rural states of the county. One of the originally selected counties elected not to participate and was replaced by a county within the same region. Five age groups were sampled: five, seven, ten, thirteen, and sixteen year olds. Analyses were performed separately for males and females; current, former, and nonmigrants and Black, White, and Spanish-speaking migrants.

Instruments in seven domains were used to define migrant students' needs. These domains and representative factors within each domain included: (1) Background (school attendance, family support of school activities, language problems, health problems, etc.), (2) Ability (nonverbal ability), (3) Gross Motor (speed, explosive power, cardiovascular endurance, balance, etc.), (4) Fine Motor (hand-eye coordination, fine motor agility, and digital coordination), (5) Achievement (vocabulary, reading comprehension, math concepts, math problems, etc.), (6) Self-Concept (self-acceptance, self-security, social maturity, peer affiliation, family affiliation), and (7) Social (teacher rated: socially insecure, teacher rated: most popular, etc.)

Overview

Background Domain

The substantial relationships between background or socioeconomic status and educational performance had been well-documented. Students born into poverty are locked into a

constellation of factors including substandard housing, underemployment and unemployment, poor nutrition, inadequate health services, and limited cognitive stimulation, all of which interact to effect poor academic performance, retarded psychomotor development and feelings of inadequacy and insecurity. *This study indicates that migrant students are more frequently absent from school than nonmigrant students. Migrant students also repeat more grades, have families which are less likely to support school efforts, are more often without proper dress and, if Spanish surnamed, are likely to have language difficulties.* For those who have not observed students in poverty, it is difficult to appreciate the consequences such a lifestyle inflicts on human development. These negative factors do not act singly to hamper a child's development, but act in concert with a wide range of social, cultural, and biochemical accomplices. Such shared complicity does not imply lack of importance of any single factor but *provides conclusive evidence that multiple intervention strategies are absolutely essential.*

Current migrant students, particularly White and Spanish-speaking migrants, show a common profile of *malnourished children in affluent societies. This profile is characterized by (1) low height for age, and (2) overweight for height, stemming from a protein and vitamin poor diet rich in starches and carbohydrates.* (Vol. III, Sec. I, Chap. 3).

Ability Domain

The plight of migrant students constitutes a naturally occurring "treatment" in the form of radically depressed socioeconomic status, with its attendant nutritional, experiential, health, and emotional risks. Three groups of students, differing in ethnicity, are for 24 hours a day, every day of their young lives, exposed to this "treatment." By examining the effects of this treatment on migrant students' cognitive development, we may gain a fuller appreciation of the price these students pay. The findings of the present study enable several conclusions to be drawn relative to the nonverbal cognitive development of migrant students; *(a) differences in nonverbal ability between nonmigrant and both current and former migrant students are substantial, approaching or surpassing one-half standard deviation on almost every contrast; (b) differences in nonverbal ability between nonmigrant and migrant students in this study may be an underestimation of the disadvantage among migrant students because the nonmigrant group (enrolled in the same schools as the migrant students) average one-third of a*

standard deviation below the national norm; (c) differences between nonmigrant and migrant students are more numerous and of greater magnitude than are the differences among Black, White, and Spanish-speaking migrant students, i.e., differences due to social class are greater than differences due to ethnicity; and (d) differences between nonmigrant and migrant students increase with the age of the groups examined. (Vol. III, Sec. I, Chap. 3).

The needs of migrant students generally are most pronounced in the cognitive and affective domains and increase with age. This finding is in opposition to those theories which view genetic factors as the primary determinants of cognitive development. Another of this study's findings which contradicts the genetic hypothesis is that social class differences far outstrip ethnic group differences, particularly in the achievement area. Conclusively, the migrant life *appears to be a powerful equalizer of social class standing and when three ethnic groups are so "equalized," the differences in academic achievement and nonverbal ability, normally observed among these groups, are reduced substantially.* (Vol. III, Sec. I, Chap. 3).

Gross Motor Domain

Gross motor development is a good indicator of physical maturation and the quality of the environment to which an individual has been exposed. *Migrant students have serious gross motor deficiencies with the greatest needs being evident among seven and ten year olds. The largest differences between migrant and nonmigrant students appear on the Cardiovascular Endurance, Flexibility, and Balance factors.* Recognizing the close interrelationships between certain Gross Motor factors and also recognizing the considerable vulnerability of a young person's central nervous system to environmental insult, *immediate attention should be given to the possibility that nutritional deficits, health problems, and/or ingestion of toxic substances may be causally related to gross motor retardation among migrant students.* (Vol. III, Sec. I, Chap. 3).

Fine Motor Domain

Results on the three Fine Motor factors, although not as pronounced as the needs in the Gross Motor domain, indicate a higher level of performance for nonmigrants on two of the three factors. Interestingly, male migrant students tend to have greater needs in the Gross Motor domain, whereas female students show the greatest needs in the Fine Motor domain. (Vol. III, Sec. I, Chap. 3).

Achievement Domain

The Achievement domain differences between migrant students (current or former) and nonmigrant students are substantial indeed. *Greater performance deficits are evident on the reading factors than on the math factors, although on most contrasts, migrant students score more than .50 standard deviations below nonmigrant students. Male migrant students evidence slightly greater needs in the Achievement domain than their female counterparts.* In general, there is a trend toward greater achievement deficits with successive increases in age. *One of the most important findings of this study, it should be re-emphasized, is that social class differences in Achievement (reflected in nonmigrant/migrant contrasts) are far more numerous and of greater magnitude than any of the ethnic group contrasts after controlling for social class.* The "cycle of migrancy" produces a profound and progressively negative effect on scholastic achievement, and this effect appears to be independent of ethnic group membership. (Vol. III, Sec. I, Chap. 3).

Self-Concept Domain

Nonmigrant students have more positive self-concepts than do either current or former migrant students. This advantage becomes pervasive shortly before adolescence. The factors on which the greatest needs exist are Social Confidence, Social Maturity, Peer Affiliation, and Self-Acceptance. *It might be argued that the greatest burden the migrant student carries into adolescence is a low self-concept accompanied by feelings of insecurity, inadequacy, and self-doubt.* (Vol. III, Sec. I, Chap. 3).

Social Domain

Nonmigrant students are more often rated by their teachers as having healthy personalities and being more popular than either current or former migrant students. Current migrant students are more often rated as socially insecure, while former migrant students are more often rated as behaviorally disruptive. (Vol. III, Sec. I, Chap. 3).

Florida Migratory Education Program

A careful analysis of the current Florida Migratory Childrens' Compensatory Education Program rationale and emphasis makes it abundantly clear that from a statewide perspective, the program is comprehensive and, with few exceptions, closely

parallels the needs documented in this study. Paradoxically, what appears to be a strength at the state level is a clear weakness at the local level. Few, if any county programs employ a multibehavioral needs assessment of individual migrant students as a basis for delivering specific services. (Vol. III, Sec. II, Chap. 5).

Also, this study has shown that the intent of the Florida Migratory Childrens' Compensatory Program is well conceived and properly targeted, however, whether the intent is being implemented and whether what is being implemented is helping migrant children remains unaddressed in this study. What is abundantly clear is that the FMCCP is targeted on some very real and pervasive needs of migrant children. (Vol. III, Sec. II, Chap. 5 and 6).

General Comments

Migrant students suffer from an inequality of developmental opportunity. Poverty jeopardizes the students' development by withholding the basic life support requirements which enable middle-class students to grow and learn. It should be apparent from the wide range of deficits characterizing migrant students' performance that simply insuring equality of educational opportunity is manifestly insufficient. What is required is a new manner of organizing the myriad of social service agencies behind a call for equalizing developmental opportunity for migrant students. Equality of development opportunity does not mean that every migrant student should be given a bicycle, a television set, tennis lessons, or one month of this favorite summer camp, but it does mean that from the time of conception, every child is guaranteed the fundamental requirements for normal growth and development. *It is vividly apparent from the results of this study that among migrant students these fundamental requirements are not being met.*

Current versus Nonmigrant

- Background Domain. In the Background Domain study findings indicate that current migrants are more likely to have repeated a grade and have a greater frequency of absenteeism than their nonmigrant peers. Differences in language problems increase in magnitude through age thirteen. This may be due to the fact that competency in English becomes more essential with each successive grade and, thus, poor English becomes more noticeable to teachers rather than because English-speaking proficiency deteriorates as male Spanish-speaking migrants mature. Overall, the differences are substantial, reflecting a general socioeconomic and cultural factor separating nonmigrants and current migrant students. These differences are greatest for both sexes at the ten- and thirteen-year-old levels.

- Ability Domain. In the area of ability study findings show little differences at the five-year-old level; however, approximate one-half standard deviation difference occurs between the two groups at the seven-year-old level and there is a tendency for these differences to increase with age. The findings further indicate that beginning at age thirteen the fluid ability of current migrant students is approximately the same as that of their nonmigrant peers who are three years younger. Overall, the current migrant students are substantially lower in this important ability (fluid ability) than nonmigrant students.

- Gross Motor Domain. The majority of differences between nonmigrant and current migrant in the Gross Motor Domain favor the nonmigrant. Significant overall differences are evident for four of five age levels among males but only one overall difference (for seven year olds) is significant among females. The largest difference between nonmigrant and current migrant females occur at the seven-year-old level. Among males, the largest single difference between current migrant and nonmigrant students appears at the ten-year-old level in balance. Differences favoring nonmigrant males are also found at ages seven to thirteen in this factor.

- Fine Motor Domain. The study findings for the Fine Motor Domain show that the five- and seven-year-old female nonmigrants outperform current migrants in three Fine Motor Domain factors in their respective age groups. Differences in fine motor agility and in hand-eye coordination favor the nonmigrants. Three of four differences in digital coordination favor the current migrants.

- Achievement Domain. The results of the study indicate that there is an overwhelming difference between nonmigrants and current migrant students in the achievement factors; these differences increase with age, and current migrant males appear to be at a slightly greater disadvantage than their female counterparts. Specifically, the findings indicate that overall differences at the five-year-old level are small but consistently favor the nonmigrant, while large differences become evident at the seven-year-old level and continue through the sixteen-year-old level. Also, there is a discernible tendency for current migrant students to be lower in reading and math, within the reading area current migrant students score lowest in the vocabulary factor and comparatively higher in the reading (comprehension) factor.

- Self-Concept Domain. The five-year-old current migrant student is almost indistinguishable from the nonmigrant five year old in the Self-Concept Domain. However, at the seven-year-old level small differences, primarily in social maturity, are evident. Additional findings show that at the ten-year-old level, large differences for both sexes are apparent with current migrant students being low in self-acceptance, self-security, social maturity, social confidence, teacher affiliation, and peer affiliation.

Nonmigrants versus Former Migrants

- Background Domain. Similar findings for this category of students were evident in the Background Domain. More former migrant students have repeated grades and are absent more frequently than their nonmigrant counterparts. Similar language problems occur at the older age levels from ten to thirteen according to the study results.

- Ability Domain. The results of the study show a similar pattern of differences between nonmigrants and former migrants, as found between nonmigrant and current migrant students. Again, there appears to be an absence of differences among five year olds and evidence of an increasing difference with age.

- Gross Motor Domain. Based on the findings it appears that the overall differences between nonmigrant and former migrant students in gross motor performance are significant at the five-, seven-, thirteen-, and sixteen-year-old levels among males and the seven- and ten-year-old levels among females. The most consistent and substantial differences favoring nonmigrant over former migrant males are evident in the cardiovascular endurance and flexibility factors. In addition, it was found that

former migrant five-year-old males are comparatively more deficient in gross motor performance than are five-year-old females, while at the seven- and ten-year-old levels the overall differences between males and females are of similar magnitude.

- Fine Motor Domain. Regarding the Fine Motor Domain the study findings show that nonmigrant males outperform former migrant males in favor of the five significant comparisons, whereas nonmigrant females outperform former migrant females in all seven of the significant contrasts.

- Achievement Domain. In general, the differences between nonmigrant and former migrant students are somewhat less pronounced than the differences between nonmigrant and current migrant students.

- Social Domain. In general, the study findings indicate that the differences are small but consistently tend to place nonmigrant students at an advantage. Teachers rated the former migrant students as being more behaviorally disruptive in five of five contrasts, whereas nonmigrant students are rated by teachers as having a healthy personality at every age level among females and at the thirteen-year-old level among males.

Current Migrants versus Former Migrants

- Background Domain. The findings evidence the greatest deficiencies in the background factors to be for the current migrant students while former migrant students fall in between the other two groups but resemble the current migrant more than the nonmigrant. The findings also show that current migrants are more likely to have repeated a grade and that absences are more prevalent for the current student, particularly for the male thirteen year old.

- Ability Domain. The findings indicate little difference between current migrant and former migrant students in the fluid ability factor.

- Gross Motor Domain. The study results show that overall differences in the Gross Motor Domain are significant at the seven-, ten-, and sixteen-year-old levels among males and at no level are the differences between current and former migrant females significant. The current migrants outperform former migrant students in the cardiovascular endurance factor in five of the six contrasts.

- Fine Motor Domain. The results of the study show that there is a tendency for the differences in the Fine Motor Domain to favor current migrant students at the ten-year-old level with four of the five contrasts favoring the current migrants.

- Achievement Domain. The findings indicate that former migrant students are in as much need relative to achievement factors as are current migrant students.

- Self-Concept Domain. The study results show that with the exception of the school affiliation factor in which both migrant groups outscore the nonmigrant groups and the family affiliation and self-assertion factors in which no differences exist, the nonmigrant students evidence higher self-concept scores than former or current migrant students. In the social confidence and social maturity factors, both current and former migrant students show depressed scores.

- Social Domain. According to the study results the differences between current and former migrant students in the six social domain factors are minimal with the exception of one interesting pattern. Current migrant students tend to be more frequently rated as socially insecure while former migrant students are more often rated as behaviorally disruptive and least popular.

Background Domain. The study findings indicate that the largest differences in the Background Domain appear on the Language Problems factor with the Spanish-speaking migrants being on the average more than one standard deviation below Black and White migrant groups. The findings also show that the White migrants tend to have more physical and health problems with Black and Spanish-speaking migrants being indistinguishable from one another in this factor.

Ability Domain. The results of study show that differences between nonmigrant and migrant students are more numerous and of greater magnitude than the differences among Black, White, and Spanish-speaking migrant students, i.e., differences due to social class are greater than differences due to ethnicity. The fact that ethnic group differences in Piagetian Conservation Test among five- and seven-year-old migrant students are largely insignificant, coupled with the finding that social class differences in the conservation test are significant, provides additional support to the hypothesis that environmental factors exercise a strong influence in cognitive development. Further evidence shows that ethnic group differences in the Fluid Ability factor favor ten-, thirteen-, and sixteen-year-old White and Spanish-speaking migrants over Black migrants by four or five I.Q. points.

Gross Motor Domain. According to the study findings there is a general tendency toward quite pronounced differences which favor Black migrants over White migrants at the first three age levels, with these differences largely disappearing by ages thirteen and sixteen. It was also found that Black migrants generally score higher than White and Spanish-speaking migrant students in speed, balance agility, and static arm strength. Most of these differences are statistically significant and greater than one-third standard deviation. Additionally, the differences between Black migrants and Spanish-speaking migrants in gross motor performance are more pronounced than for either of the other two ethnic contrasts. Frequently noted differences between Black migrants and Spanish-speaking migrants were found at the ten- and sixteen-year-old levels whereas differences were less evident at the five- and thirteen-year-old levels. It is possible that the relative infrequency of migrant group differences at the five-year-old level reflects the recent practice of enrolling migrant children in preschool.

Fine Motor Domain. The study findings show that Spanish-speaking migrant students hold a clear and substantial advantage over White and Black migrants on Fine Motor factors. This advantage tends

to pervade the entire age range and holds true for both sexes. On the other hand, Black migrants outscore White migrants in fine motor agility, but the differences in hand-eye coordination and digital coordination are isolated and largely insignificant.

Achievement Domain. The results of the study show that ethnic group differences in the Achievement Domain tend to favor Black migrants over White migrants except for White migrant females who show an advantage at two age levels over Black migrant females. Specifically, it was found that Black migrants generally outscore Spanish-speaking migrants with the exception of the five-year-old male contrasts in which Spanish-speaking migrants hold the advantage. Also, it was found that differences between White migrants and Spanish-speaking migrants are consistently in favor of the White migrants, again with the exception of the five-year-old male contrasts which favor the Spanish-speaking migrants.

Self-Concept Domain. In general, the findings indicate that Spanish-speaking migrants have much more depressed self-concepts than White migrants. The only consistent deviation from this pattern is that Spanish-speaking migrants have higher school affiliation scores than do White migrants. It was found that differences between Black migrants and White migrants are mixed, with Black migrants having an advantage in Self-Acceptance and School Affiliation and White migrants scoring higher in Social Maturity and Self-Confidence.

Social Domain. The results of the study show a very interesting and important difference between the social behavior of Black and White migrant students. It was found that White migrant students are much more likely to be rated as socially-insecure, while Black migrant students are more likely to be rated behaviorally disruptive. Possibly this could be due to the cultural differences which may lead the students to act out their insecurity in different ways. The findings also showed that the Spanish-speaking migrant student is rated as having behavioral problems much less often than either Black or White students. The patriarchal family structure of the Spanish-speaking migrant may be one explanation for this difference.

FUNDING RESOURCES FOR MIGRANT FAMILIES
(Task 4)

Methodology

A master list of financial resources was compiled according to funding source and by program category. This list was further divided into two sections: one consisting of Federal projects in Florida and one consisting of state and other programs receiving funding from one or more public sources. Involved in the classification was the need to make a determination of what constitutes a program "designed to aid only the migrant family." To accomplish this, a practical test was devised to assist in the analysis. This test incorporated the following criteria. For each resource the migrants must be explicitly recognized as part of the program's target population and (a) the majority of services must be addressed to migratory needs, (b) the majority of recipients must be migrants, or (c) the program must provide the only services of its kind in the area available and must be accessible to migrants. Redundancy in program listings was avoided by listing only once a Federal program having projects in Florida regardless of the number, size, and importance of the projects.

The results of this task plus tasks 5 and 6 represent an analysis and distillation of information obtained through interviews and reviews of numerous documents. More than 60 program administrators in Federal agencies in Washington and Atlanta, state agencies in Tallahassee and Jacksonville, and projects located throughout South Florida were interviewed.

Summary of Findings

One of the major findings, which also represents one of the conceptual problems encountered in dealing with this particular task, was the fact that the term "migrant" is by no means self-explanatory in terms of program eligibility. Essentially, persons who are migrants may be eligible for assistance because they also happen to qualify by virtue of being rural, poor, a member of a minority group, disadvantaged or culturally deprived. Most programs recognize the special needs and problems of migrancy by offering services to individuals, who at one time, but not necessarily at the time of receipt of services, migrated for the purpose of seeking employment. Essentially, what this means is that all public programs could presumably be a potential source of services to migrants. (Vol. II, Sec. II, Chap. 2).

In the analysis, it was found that more than 50 programs potentially provide direct services to migrant families in Florida. Thirteen of these programs identified as "aiding only the migrant family" were cited for further study as to their objectives (Task 5). Of these thirteen, ten were found to be Federally-funded and required further analysis as to their implementation (Task 6). (Vol. II, Sec. II, Chap. 3).

PROGRAM OBJECTIVES
(Task 5)

Methodology

In order to accomplish the purpose of this task, a Model for Social Program Objectives was conceptualized which emphasized the interrelationship among the necessary elements of an appropriate objective. It was necessary to work with three program-results determinants to operationalize the model. These determinants were identified and defined as

- Equity - the applicable principal of social equity is the principle of vertical equity which holds that persons in different circumstances be treated in an appropriately different manner -- i.e., programs addressed to migrants are justifiable because migrants have special problems arising out of their mobility, cultural isolation, and polticoeconomic powerlessness.

- Effectiveness - to what extent planned services have materialized in accordance with stated service-delivery plan.

- Efficiency - entails the relationship between program input and program output.

The program results determinants were taken through two analytical steps in order to translate them into assessment-feasibility criteria. The following resulting criteria formed the basis for the content analysis of the objectives.

- WHO receives the service? (Objectives should include a description of the target group).

- WHAT types of services are provided? (Broad categories of programs should be presented).

- HOW is service delivery implemented? (Program components that lead to the SPECIFIC OUTCOMES should be presented).

- HOW is the success of the desired specific outcomes MEASURED? (Instruments and procedures used should be explained).

Finally, to overcome noted deficiencies in the published objectives, the objectives were restated to conform to the assessment-feasibility criteria.

Summary of Findings

It was found that, in every instance, the programs under study had some form of published objectives. The purpose of the published objectives are primarily public information and not program evaluations. Consequently, an analysis of the contents of these objectives revealed, in most cases, the objectives were adequate in specifying the target population and services approved; but in other areas the objectives were generally weak. (Vol. II, Sec. III, Chap. 3).

Few of the program objectives expressed desired program results as specific outcomes stated in behavioral terms; rather they consisted of broad goals, not lending themselves to evaluation and an objective assessment. Inasmuch as little emphasis was given to specific outcomes, it follows that a means for the evaluation of the achievement of such outcomes was also deficient in the objectives. It should be noted that one cannot necessarily safely infer from this actual deficiencies in program analysis and evaluation. At least one program had imparted general and incomplete statements of objectives in public releases while at the same time being engaged in a relatively sophisticated evaluation activities. (Vol. II, Sec. III, Chap. 3).

It was also found that there is an inherent conflict between the purpose of the objectives published by program agencies and the impacted purpose of the published objectives set forth in this study. The purpose of the objectives statements obtained through our own document collection efforts were primarily public information: to inform other agencies, persons making referrals from our agencies, prospective program clients, and others with an interest in the programs of the general kinds of services provided and the general area and population served. The objectives are not stated in terms which would facilitate an assessment of program results because facilitating an assessment of program results does not appear to be the purpose of these agencies in publishing objectives. Programs affecting migrant families in Florida had not reached that point, but we believe that the restatements of objectives provided in this report represent a sound beginning. (Vol. II, Sec. III, Chap. 3).

IMPLEMENTATION OF MIGRANT PROGRAMS
(Task 6)

Methodology

In order to achieve the objectives of this task, it was necessary to concentrate on the overall input of migrant programs to obtain a "macro" view. This analytical posture enabled us to draw conclusions regarding the impact of the migrant program as a whole rather than merely to specify deficiencies in local operations which may affect only a few people. A secondary factor in our decision to approach the question from the "macro" rather than the "micro" standpoint was the chronic lack of basal data available for individual programs. The effect of this deficiency is addressed both as it relates to the implementation of an individual program and to the overall attempt to impact migrants.

The following analytical techniques were employed in addressing the objectives of this task:

- Review of the literature on program implementation, migrant programs, and other relevant topics, including the legislative history of programs.
- Analysis of program documents obtained from program representatives and of transcripts of interviews with these representatives.
- Interviews with crew leaders and migrants to ascertain perceived needs and participant response to existing programs.
- Analysis of services provided in relation to identified needs.
- Interviews with civic leaders to ascertain community response to programs.
- Budget analysis.
- Decision point analysis.
- Analysis of program interrelationships.

Summary of Findings

Despite the growth trend in services being provided to migrants barriers continue to exist as to an effective implementation of policy. Among these are the definitions used by the

various agencies to determine who is a migrant and, thus, who is eligible for services. Each agency serving migrants has its own unique definition of eligibility. While it serves the purpose of that agency, the uniqueness of the definition prevents complete coordination of other services with other agencies serving migrants. (Vol. II, Sec. IV, Chap. 2).

It appears that gaps and overlaps of existing services arises from the fact that agencies have failed to regard the questions, Who are the people to receive the services? and How many of them are there?, or that these questions are addressed by the agencies from different points of view. Our findings indicate total voids in some areas (primary health care) and the potential duplication of others which may be a result of discrepancies in the number of migrants reported and the definition of the term migrant. It was found that for those counties having a relatively low number of services and low number of students that services were proportional to the population. In one case (Saint Lucie County) an identification was made of a county appearing to have a high level of services in comparison to a relatively low number of migrant students. On the other hand, six counties in the central part of the state appear to have a low level of services in relation to a high level of migrant students. At a somewhat higher level of analysis, evidence points to the conclusion that in certain parts of the state services are not physically accessible to migrants simply because they are in short supply. (Vol. II, Sec. IV, Chap. 2).

From the "macro" viewpoint, it was found that the desired impact of the overall focus of "aiding the migrant family" fell short due to difficulties in the implementation process. (Vol. II, Sec. IV, Chap. 2).

It was determined that a coordinated approach to the problems of the Florida migrant is of vital importance in order to implement and maintain an effective service delivery mechanism. (Vol. II, Sec. IV, Chap. 2).

It was concluded that implementation cannot succeed or fail without a goal against which to judge it. Program objectives provide that necessary goal—without them, a program-by-program analysis of implementation would be speculative at best. (Vol. II, Sec. IV, Chap. 2).

CHANGES IN NEEDS OF MIGRANT CHILDREN IN 1980 (Task 8)

Methodology

The Delphi approach was used for achieving the objective of this task. This methodology allowed experts to systematically communicate with each other anonymously about a complex problem—in this case, the relationship between societal conditions and educational needs of migrant children. The participants were interrogated by a sequence of questionnaires in which the responses to one questionnaire was used to produce the next one. The resulting atmosphere of the exercise enabled a communication process to occur which permitted the participants to change earlier views and benefit from the contributions of others unbiased by psychological feelings. This same methodology has become a standard approach for many organizations for conducting efforts in forecasting, planning, assessment, and rational policing analysis.

In compiling the information for this task report, responses from the 13 expert panelists were interpreted, synthesized, and qualified by information obtained from results of students educational needs assessment, other surveys and analysis comprising the overall needs assessment, interviews with program administrators and others in contact with migrant issues and programs and library research of emerging public policy developments.

Summary of Findings

Most of the expert participants of the Delphi panel thought that we would see some form of block grants involving migrant programs by 1980. However, *at the present time*, there is little to indicate that block grants have any appreciable chance for adoption as similar proposals in the education and health area have had no success in Congress in the past. The most likely time to look for block grants as well as other program revisions and innovations will be 1978. No concensus of opinion emerged from the panel on changes in the national migrant education program by 1980, although it is likely, to a certain extent, to be a footnote for developments involving block grants. (Vol. II, Sec. V, Chap. 2).

The panel members were doubtful that any sizable amount of additional resources will be applied to benefit migrant families by 1980. (Vol. II, Sec. V, Chap. 2).

The Delphi panel saw no dramatic societal changes by 1980. None of the participants were willing to venture a prediction that the economy would seriously deteriorate by 1980, that there would be acts of violence on the part of organized farmworkers pressing for recognition of their political and economic demands, or that any other developments of comparable drama and impact would occur during the rather brief period of 1976-1980. (Vol. II, Sec. V, Chap. 2).

There was little doubt, on the part of the panel members, that poverty will continue to exist in 1980 and, thus, the migrant children will evidence the same profile of needs as identified in this study. (Vol. II, Sec. V, Chap. 3).

RECOMMENDATIONS

The comprehensive findings that resulted from our research effort provide a foundation on which to base a coordinated, multifaceted approach to the addressing of the problems of migrant students in the State of Florida. We recommend that these findings be utilized as the basis for the formulation of a 5-Year Multi-Intervention Action Plan to meet the needs of children of migratory agricultural workers.

In the following suggested framework for the Plan, we recommend that the State of Florida Department of Education assume the major responsibility for providing the leadership for its formulation and implementation. The rationale for this suggestion is based on the fact that the Department (1) represents one of the largest funding resources, (2) maintains the greatest network of services, and (3) embodies the optimal opportunities for reaching all elements of the target population.

In the formulation of the plan which would follow our prescribed guidelines, we emphasize the importance of giving consideration to the following major concerns:

- Changes in Racial/Ethnic Composition

  A major change in the racial/ethnic composition of the migrant farmworker population has occurred. There has been a very definite increase in the number of Mexican-Americans working in migrant agriculture to the point where Mexican-Americans are now in the majority.

- Recipients of Migrant Program Services

  Only 3 out of every 10 migrant students are being served by migrant programs in school districts.

  Florida school districts report 4.10% of the migrant students being classified as handicapped; based on estimates of the national population, 10% of all students would be reported as having mental, physical, or emotional handicaps. This would appear to be a severe underreporting of students with handicapped conditions, especially given the fact that the population is of the lower socioeconomic groups where handicapping conditions tend to be more prevalent.

- School Enrollment

  Over the past five years, six times as many school districts have perceived an increase in enrollment as have perceived a decrease in enrollment, and for the next five-year period, no school district expects a decrease in the enrollment of migrant students.

  A significant increase in prekindergarten, kindergarten, and high school enrollments has occurred in recent years in both relative and absolute amounts. This trend has been projected to continue well into the near term future.

- Educational Programs/Strategies

  There is a need for the development of specialized physical education programs for migrant students.

  There is a need for specialized extracurricular activities which provide greater opportunities for leadership and socialization for the migrant child, thereby enhancing his self-concept.

  There is a need for the development of nutritional, homemaking and parenting skills at the elementary levels.

  There is a need to study, utilize, and reinforce assessed strengths of migrant children and their families.

  There is a need to give greater recognition to the economic factors which may impinge on an older student's decision concerning the continuation of his or her educational program.

  There is a need for the development of transitional strategies for the preschool child entering the elementary grades.

  There is a need for a statewide screening program for three- and four-year-old migrant students to increase the effectiveness of the early childhood component and to provide for an early baseline against which subsequent intervention strategies can be evaluated.

  There is a need for local projects to insure that compensatory reading and math instruction reaches the migrant student, under either Title I or the Migrant Program auspices.

There is a need to give special attention to determining the extent to which poor nutrition and ingestion of toxic chemicals may negatively influence the migrant student's development.

- Coordination/Statewide Data Base

  There is a need for the forging of better linkages between Florida and Texas because of the influx of Mexican-American students.

  There is a need for the development and maintenance of a statewide data base that will provide a single consistent and comparable set of data for all facets of migrant service programs. This data base must be comprehensive in scope and designed in such a way that frequent updating is possible. (A more detailed recommendation follows in this section).

- Implications for Further Study

  Implementation of a carefully designed growth and nutrition study including a standard series of anthropometric measures and biochemical assays is recommended. If possible, the study should relate nutrition and biochemistry variables to fine and gross motor factors that might be indicants of specific biological insult or nutritional problems and thus could be employed in large-scale screening programs.

A RECOMMENDED FIVE-YEAR PLAN

The recommended Five-Year Multiple Intervention Action Plan to meet the needs of children of migratory agricultural workers is the logical and necessary culmination of our research effort. It is designed to serve as a suggested framework for a coordinated statewide affirmative action plan, based on the collective input of the theoretical and empirical data generated from the study.

The Plan comprises three phases and extends over a 5-year overlapping time frame with provisions for a continual data feedback mechanism to ensure that overall objectives will be met at any given point in time. The Plan includes the following phases:

Phase 1: Planning

Centers on activities at the state level to devise the coordinative mechanisms and procedures necessary to (1) implement a Pilot Project and (2) utilize feedback from the pilot project to substantiate hypotheses and redirect efforts as necessary in anticipation of Statewide adoption of the Plan.

Phase 2: Pilot Project

A small-scale effort to effect a multi-intervention plan on a selected segment of the population and to gather data to ensure the success of subsequent Statewide endeavors.

Phase 3: Statewide Adoption

The broadening of the efforts begun and revised in the Pilot Project phase to be ultimately functioning on a statewide level.

Phase 1: Planning

Activity: Convocation of Administrative Hearings

This activity calls for the convocation of an administrative hearing on migrant problems, held under the auspices of the Department of Education. The three goals of such a hearing would be:

1. The generation of public interest in the problems of migrants and creation of a greater awareness on the part of the public that the State is, in fact, addressing the problems.

2. Arrival at a statewide concensus among all interested parties as to the problems and needs of Florida's migrants and a commitment to taking affirmative action toward meeting those needs.

3. Formulation of a steering committee charged with the responsibility of addressing the needs in terms of the 5 Year Action Plan.

This hearing would involve both providers and consumers at both the State and local levels of services within the following areas of concern:

- Health
- Environmental Protection
- Education (early childhood, public school, vocational, adult, etc.)
- Labor and Agriculture
- Social and Rehabilitative Services
- Nutrition
- Employment and Training

and would include the participation of migrants, crew leaders, advocacy groups, spokesmen for agencies serving migrants, growers, processors, labor leaders, and others.

Activity: Formation of a Steering Committee

A steering committee with members representing each of the aforementioned areas of concern would be charged with the following suggested responsibilities:

- Development of a coordinated planning mechanism at the state and local levels possibly similar to that used by the Community Coordinated Child Care Centers.

- Investigate ways in which workshops would work toward training agency personnel in the development of measurable program objectives (how they are formulated, what constitutes measurable and empirical data, and how social programs can be assessed as part of an overall attempt to effectuate a coordinated multiple-intervention action plan).

Phase 2: Pilot Project (Year 2)

Activity: Identification of Pilot Counties and Populations

Using information provided in this report, selection of appropriate pilot locations should be made. Once this occurs, the population data presented in the study can be verified and updated. This should be accomplished using existing means of data collection, such as public school outreach workers in high impact areas.

Activity: Needs Assessment: The Macro Level

The results of the needs assessment survey should provide an adequate baseline from which to draw conclusions regarding the perceived needs of migrants. An analysis of population changes and programs implemented subsequent to this April 1976 study would update this data to render it operational for the pilot areas.

Activity: Needs Assessment: The Micro Level

This involves an assessment of the unique problems and needs of each individual student in the pilot target area. We suggest that the utilization of the theories of "Fluid Ability" and "Investment Dividend" be used as rationale or organization for the multiple intervention approach. It is our belief that the advantages of operating from this theoretical perspective would provide a priority schedule for addressing needs of the migrant students in addition to providing a framework for meaningful evaluation and interpretation of results. The net effect would be a refining and redefining of current, more "shotgun oriented" approaches.

Consideration should also be given to a systematic strength assessment in which the results could be used to differentiate successful children from their less successful peers in terms of the strengths and abilities that are brought into play by these children. This approach would help to identify factors and strengths that could be utilized to more effectively remediate the weaknesses.

Activity: Assessment of Available Services

Using the information provided in Tasks 4, 5, and 6 of this study as a point of departure, a comprehensive overview of available services in the pilot area can be obtained.

Activity: Matching Need and Available Services

Once an appropriate assessment of needs and services has been accomplished, the next task would be to compare the two sets of findings to identify the most effective means for bringing comprehensive services to those in need.

Activity: Implementation of Coordinated Service Delivery Plan

Consumers and appropriate providers must be brought together in the manner best suited to the individual pilot area. Ascertaining the optimal means for accomplishing this will require extensive logistical planning and experimentation. This activity is the crux of the Pilot Project.

Activity: Documentation of Results

The coordinating agency would be responsible for ensuring that a means for documentation of results is implemented, to be included both as a part of the feedback device to the ongoing planning component and to supply vital information to other jurisdictions which will subsequently be included in the Statewide adoption of the Plan.

Phase 3: Statewide Adoption (Years 3 through 5)

Utilizing the data generated from the Pilot Project areas, a detailed approach for implementation of a multiple-intervention action plan statewide, with annual adjustments (the migrant education component of each annual increment would constitute the annual state plan) would come to function within a three year period.

Constant data gathering (on a uniform basis) would provide feedback on additional means for coordination and modification and necessary redirection of efforts of the Plan.

DEVELOPMENT OF A DATA BASE

One major task that lies ahead for the State of Florida is the development of a data base around the migrant farmworker and his family. This process is an essential first step if the State is to develop and implement the comprehensive social service system that is necessary in addressing the needs of migrants. In order that the system be designed in such a way that its utility is maximized, a number of factors must be considered. Among these critical factors are:

Data base should be comprehensive

- Migrant worker data should be collected on demographics, health conditions, work habits, travel patterns, and plans and expectations;
- Migrant children data should be collected on demographics, educational status, and health factors; and
- Social system data should be collected on educational enrollment, health service usage, and food service and welfare program registrations; and
- Economic data should be collected on agricultural production, wage rates, and unemployment rates for the current year with projections of each variable for the succeeding five-year period.

Data base should be flexible

- It must be possible to enter data for new sets of variables into the system relatively easily;
- It must be possible to call forth different data outputs (combinations of variables) as the need arises, and
- It must be possible to provide a broad range of information to all levels of decisionmakers.

Data base should be updated frequently

- An update of the data in the system should be accomplished at least annually; and
- An update of the data should include surveys of work sites, a census of school districts, testings of a sample of workers and children for health needs and children for educational factors.

Data base should be accessible

- Adequate provision for safeguarding individual privacy must be assured,
- Adequate utility must be designed-in for planners,
- Adequate availability must be provided for decisionmakers at all levels (from the Governor's Office to the individual teacher), and
- Adequate clarity, readability, and understandability must be built into the data output.

STUDENTS' NEEDS
(Vol. III, Sec. I, Chap. 3)

Background Domain

Nonmigrants versus Current Migrants

1. Current migrants are more likely to have repeated a grade than nonmigrants. Large and consistent differences are evident on days absent with current migrants being absent more frequently.

2. Among males, differences in language problem factor increase in magnitude through age thirteen. (It is unlikely that English-speaking proficiency deteriorates as male Spanish-speaking migrant students mature, but rather that competency in English becomes more essential with each successive grade and, thus, poor English becomes more noticeable to teachers). Differences between nonmigrant and current migrant females show only a slight increase why age.

3. Overall, the differences are substantial, reflecting a general socioeconomic and cultural factor separating nonmigrant and current students. The largest differences are found at the ten- to thirteen-year-old levels. This pattern holds true for both sexes.

Nonmigrants versus Former Migrants

1. More former migrant students have repeated grades than have nonmigrant students.

2. Former migrant students are also absent more frequently than nonmigrants.

3. No significant differences between nonmigrant and former migrant students are found consistently for physical and health problems.

4. The differences in language problems again occur at the older age levels ten to thirteen.

Current Migrants versus Former Migrants

1. Current migrants are more likely to have repeated a grade than are former migrant students.

2. Absences are substantially more prevalent among current migrants, particularly the male thirteen year old.

3. Differences in the physical and health problem factors as rated by teachers are largely significant.

4. There are substantial differences in the language problem factor reflecting the proportionately greater number of Spanish-speaking students among current migrants.

5. The background factors rank order the three migrant categories with nonmigrants possessing fewest of the negative characteristics and most of the positive characteristics. Current students evidence the greatest deficiencies in background factors. Former migrant students fall in between the other two groups but resemble the current migrant more than the nonmigrant.

White Migrants versus Black Migrants

1. Black female migrants are rated more positively than White migrants on dress factor.

2. White migrants are consistently higher in terms of absenteeism.

3. Overall the Background domain differences between White and Black are small.

White Migrants versus Spanish-speaking Migrants

1. The language problem factor dominates at all ages for both sexes.

2. Differences in the physical and health problem factors suggest that White migrants have more such problems.

3. The differences on the family support factor favor the White migrant student at age sixteen and the Spanish-speaking student at age seven.

Black Migrants versus Spanish-speaking Migrants

1. The pattern of differences between Black and Spanish-speaking migrants is very similar to that of White and Spanish-speaking migrants.

2. Spanish-speaking migrants are more likely to have repeated a grade at the thirteen-year-old level.

3. Spanish-speaking migrants are more likely to have a much higher absenteeism rate.

4. Overall, fairly large differences are evident between these two ethnic groups with the differences of language problems clearly dominating the background profiles.

Ability Domain

Nonmigrants versus Current Migrants

1. Differences between nonmigrants and current migrants on the fluid ability factor are

   — absence of differences at the five-year-old level,

   — the approximate one-half standard deviation difference between nonmigrant and current migrant seven year olds, and

   — the tendency for differences between nonmigrant and current migrants to increase with age.

2. Current migrant students are substantially lower in this important ability (fluid ability) than their nonmigrant peers.

3. Beginning at age thirteen, the fluid ability of current migrant students is approximately the same as that of nonmigrants who are three years younger.

Nonmigrants versus Former Migrants

1. The pattern of differences between nonmigrants and former migrants is very similar to that between nonmigrant and current migrant students.

2. The absence of differences among five year olds and the increasing differences with age is evident.

Current Migrants versus Former Migrants

1. None of the differences between current migrant and former migrant students in the fluid ability factor are significant at or beyond the .05 level.

2. There are no significant differences between the two migrant categories in fluid ability.

White Migrants versus Black Migrants

1. Significant differences, with the White migrants possessing greater fluid ability, are evident at three of five age levels among males.

2. Only the difference at the seven-year-old level between White and Black migrant females is significant.

White Migrants versus Spanish-speaking Migrants

1. Only two differences between these groups are significant: (1) a large difference favoring White female migrant students at the seven-year-old level and (2) a smaller difference favoring White female migrants at the thirteen-year-old level.

Black Migrants versus Spanish-speaking Migrants

1. None of the differences between the Black and Spanish-speaking migrant students are significant at or beyond the .05 level.

Overall

1. Differences in fluid ability between nonmigrant and both current and former migrant students are substantial, approaching or surpassing one-half standard deviation in about every contrast.

2. Differences in fluid ability between nonmigrant students in this study may underestimate the disadvantage prevailing among migrant students due to the fact that the nonmigrant group (enrolled in the same schools as the migrant students) averages one-third of a standard deviation below the national norm.

3. Differences between nonmigrant and migrant students are more numerous and of greater magnitude than the differences among Black, White, and Spanish-speaking migrant students, i.e., differences due to social class are greater than differences due to ethnicity.

4. Differences between nonmigrant and migrant students increase with age.

Gross Motor Domain

Nonmigrants versus Current Migrants

1. Of the eight gross motor factors—balance, speed, explosive power, dynamic arm strength, static arm strength, cardiovascular endurance, flexibility, and agility—the majority of differences between nonmigrant and current migrant students favor the nonmigrant.

2. There are comparatively few differences among females than there are among males.

3. Significant overall differences are evident at four of five age levels among males but only two overall differences (for seven and thirteen year olds) are significant among females.

4. The largest differences between nonmigrant and current migrant females occur at the seven-year-old level, which is consistent with the male comparison.

5. Among males, the largest two differences between current migrant and nonmigrant students appears at the ten-year-old level in balance and flexibility. Differences favoring nonmigrant males are also found at age seven on both of these factors.

6. Differences favoring nonmigrant males on flexibility are evident at seven, ten, and sixteen years of age.

Nonmigrants versus Former Migrants

1. Greater differences (among the described gross motor factors) between nonmigrant and former migrant males are evident at ages five and sixteen than at ages seven, ten, and thirteen, whereas for females the greatest differences appear at seven and sixteen.

2. Former migrant five-year-old males are comparatively more deficient in gross motor performance than are the five-year-old females.

3. At the seven-and-ten-year-old level the overall differences between males and between females are of similar magnitude.

4. The most consistent and substantial difference favoring nonmigrant over former migrant males are evident in the cardiovascular endurance and flexibility factors.

5. The overall differences between nonmigrant and former migrant students in gross motor performance are significant at the five-, seven-, thirteen-, and sixteen-year-old levels among males and the seven-, ten-, and thirteen-year-old levels among females.

Current Migrants versus Former Migrants

1. Current migrant students outperform former migrant students in the cardiovascular endurance factor in five of the six contrasts.

2. Five of the five differences in speed and five of the four differences in agility favor the former migrant students.

3. Overall, differences are significant at all levels among males and at the seven-, ten-, and thirteen-year-old levels among females.

White Migrants versus Black Migrants

1. The seven differences on speed all favor the Black migrants while three of four differences on flexibility favor the White migrants.

2. Five of five differences in balance favor Black migrants, and all seven differences in agility favor the Black migrants.

3. Differences between Black and White migrants in cardiovascular endurance, dynamic arm strength, and static arm strength are wither isolated or insignificant.

4. There is a general tendency toward pronounced differences favoring Black migrants over White migrants of both sexes at the first four age levels.

White Migrants versus Spanish-speaking Migrants

1. Three of four differences in the speed factor favor the Spanish-speaking migrants.

2. All three differences in cardiovascular endurance favor Spanish-speaking migrants, and four of four differences in dynamic arm strength favor Spanish-speaking migrants.

Black Migrants versus Spanish-speaking Migrants

1. The differences between these two groups in gross motor performance are more pronounced than for either of the other two ethnic contrasts.

2. Overall differences are significant at all age levels for both sexes with a tendency for larger differences at the older age levels.

3. Seven of the seven differences in speed, six of six differences in explosive power, eight of eight of the differences in balance, and six of eight differences in agility favor the Black migrant student over the Spanish-speaking migrant student.

4. Four of five differences in cardiovascular endurance, three of four differences in flexibility, and four of four differences in dynamic arm strength favor the Spanish-speaking migrant over the Black migrant.

5. Overall, Spanish-speaking migrants outperform Black migrants in cardiovascular endurance, flexibility, and dynamic arm strength while Black migrants score higher than Spanish-speaking migrants on speed, explovive power, balance, and agility. Frequently noted differences were found at the ten- and sixteen-year-old levels, whereas differences were less evident at the five- and thirteen-year-old levels. It is possible that the relative infrequency of migrant group differences at the five-year-old level reflects the recent practice of enrolling migrant children in preschool.

6. Recognizing the close interrelationships between central nervous systems, efficiency, and performance in certain gross motor factors and also recognizing the considerable vulnerability of the young students' central nervous system to environmental insult, immediate attention should be given to the possibility that nutritional defects, health problems, and/or ingestion of toxic substances may be causally related to gross motor retardation in migrant students.

Fine Motor Domain

Nonmigrants versus Current Migrants

1. Differences in fine motor agility (paper pencil tests) and hand-eye coordination favor nonmigrants.

2. Three of three differences in digital coordination favor the current migrants.

Nonmigrants versus Former Migrants

1. Differences on hand-eye coordination favor the nonmigrant in eight of eight contrasts.

2. Four of four differences on fine motor agility favor the nonmigrants.

Current Migrants versus Former Migrants

1. Differences between current and former migrants are largely significant on three of the four factors.

White Migrants versus Black Migrants

1. Three of four differences in the hand-eye coordination factor favor the White migrants.

2. The most striking differences in both magnitude and number are found in fine motor agility in which six of six differences favor the Black migrant.

3. No differences on digital coordination are existent between Black and White migrants.

White Migrants versus Spanish-speaking Migrants

1. Substantial differences in fine motor agility are evident with Spanish-speaking migrants outscoring White migrants on eight of eight contrasts.

2. Six of seven differences in hand-eye coordination favor the Spanish-speaking migrant student over the White migrant student.

3. In digital coordination three of three differences favor the Spanish-speaking migrant.

4. For males and females the overall differences between White and Spanish-speaking migrants are most pronounced at ages five and seven.

Black Migrants versus Spanish-speaking Migrants

1. Overall, there are substantial differences favoring Spanish-speaking migrants at all age levels.

2. Thirteen of fourteen differences show Spanish-speaking migrants outperforming their Black peers.

Summation

1. In the hand eye coordination and fine motor agility factors, nonmigrants generally outscore both migrant categories.

2. In digital coordination male current migrants outperform former migrants who, in turn, outperform nonmigrants.

3. More differences among males were evident at ten years of age and more differences in females were evident at five and sixteen years of age than at the other age levels.

4. Although not as pronounced as the gross motor domain differences, the fine motor differences indicate a generally higher level of performance for nonmigrants in two of the three fine motor factors.

5. On all three fine motor factors ethnic group differences overwhelmingly favor Spanish-speaking over Black and White migrant groups.

6. Differences between Black and White migrants favor Blacks on fine motor agility, whereas differences on hand-eye coordination and digital coordination are mixed.

Achievement Domain

Nonmigrants versus Current Migrants

1. Nonmigrant five-year-old males show an advantage in word meaning, listening, and alphabetizing, whereas nonmigrant five-year-old females show an advantage in word meaning, matching, and alphabetizing.

2. Overall differences at the five-year-old level are small but consistently favor the nonmigrant.

3. At the seven-, ten-, and thirteen-year-old levels overall differences are never less than three-fourths of a standard deviation and approach the full standard deviation unit in several instances.

4. The magnitude of the differences between nonmigrant and current migrant students tends to increase with age; only small differences are apparent among five year olds, with large differences becoming evident at the seven-year-old level and continuing through the sixteen-year-old level.

5. There is a discernible tendency for current migrant students to be lower in reading and math.

6. Within the reading area current migrant students score lowest in the vocabulary factor and comparatively higher in the reading (comprehension) factor.

7. In the math area current migrant students are comparatively lower on the math concepts factor.

8. Overall, there is an overwhelming difference between nonmigrant and current migrant students in the achievement factors; these differences increase with age, and current migrant males appear to be at a slightly greater disadvantage than their female counterparts.

Nonmigrants versus Former Migrants

1. In general, the differences between nonmigrant and former migrant students are somewhat less pronounced than the differences between nonmigrant and current migrant students.

2. The overall difference values at the five-year-old level (both males and females) are insignificant as is the overall difference for the seven year olds.

Current Migrants versus Former Migrants

1. Former migrant students are in as much need, relative to achievement factors, as are current migrant students.

2. The fact that former migrant and current migrant students are largely indistinguishable with respect to academic achievement suggests the possibility that it is poverty rather than any special characteristics of a migrant life style that places students at risk.

White Migrants versus Spanish-speaking Migrants

1. With the exception of a large difference favoring five-year-old Spanish-speaking migrant males over White migrant males, almost all differences for both sexes favor White migrant students.

Black Migrants versus Spanish-speaking Migrants

1. With the exception of a substantial difference favoring Spanish-speaking five-year-old males over Black five-year-old males, almost all remaining differences favor Black migrants.

2. Black migrant females evidence a greater advantage over Spanish-speaking migrant females than is the case among males.

Summation

1. Greater differences are evident in the reading factors than in the math factors, although almost every difference, whether involving a reading or math factor, is greater than .50 standard deviations.

2. Male migrant students evidence slightly greater needs in achievement areas than their female counterparts.

3. The differences between nonmigrant and current migrant five year olds are small compared to the differences prevailing at the higher age levels. In general, there is a trend toward greater achievement differences with each successive increase in age.

4. Upon entry into the mainstream of the formal education process both current and former students are much more similar in achievement level to nonmigrant students than they are at the seven-, ten-, thirteen-, and sixteen-year-old levels.

5. Black migrant males are consistently higher in math than White migrant males, whereas White migrant females are higher in math and reading than Black migrant females at the seven and thirteen levels.

6. With the exception of the five-year-old male contrast in which Spanish-speaking migrants score consistently higher than White migrants, almost all other differences favor the White migrant.

7. Differences between Black and Spanish-speaking migrants overwhelmingly favor the Black migrants, again with the exception of the five-year-old male contrast in which Spanish-speaking migrants outscore Black migrants.

8. Spanish-speaking migrant students are lower in achievement than either the Black or White migrant students.

9. One of the most important findings of this study, that of social class difference, is reflected in nonmigrant contrast, is far more numerous and of greater magnitude than are any of the ethnic group contrasts after controlling for social class. Poverty produces a profound and progressively negative effect on scholastic achievement, and this effect is independent of ethnic group membership.

Self-Concept Domain

Nonmigrant versus Current Migrants

1. The five-year-old current migrant student is almost indistinguishable from the nonmigrant five year old. At the seven-year-old level small differences, primarily on social maturity, are evident.

2. At the ten-year-old level for both sexes, large differences are apparent with current migrant students being low on self acceptance, self security, social maturity, social confidence, teacher affiliation, and peer affiliation.

3. At the thirteen- and sixteen-year-old levels, the differences between nonmigrant and current migrant males drop off slightly from the ten-year-old level, whereas among females the overall differences at these two age levels continue to increase.

Current Migrants versus Former Migrants

1. Overall, differences (total standardized differences) are insignificant for all contrasts except sixteen-year-old females.

White Migrants versus Black Migrants

1. The largest differences between White and Black migrants appear in the social confidence factor with White migrants outscoring Black migrants on six of six contrasts.

2. In the social maturity factor among females two differences (each near one-half standard deviation) favor the White migrants.

3. Among males, three of three differences in school affiliation and self acceptance favor Black migrants.

4. Overall, the differences are somewhat mixed with White migrants having a clear advantage in social confidence and social maturity and Black migrants having an advantage in self acceptance, school affiliation, and self assertion.

White Migrants versus Spanish-speaking Migrants

1. Five of five differences in self acceptance and self security favor the White migrants, whereas five of five differences in school affiliation favor Spanish-speaking migrants.

2. White migrants hold the advantage in six of six contrasts in social confidence and four of five contrasts in peer affiliation.

3. Overall, differences are significant among males at the seven- and ten-year-old levels and among females at the seven-, ten-, thirteen-, and sixteen-year-old levels.

Black Migrants versus Spanish-speaking Migrants

1. Six of six differences in self acceptance, four of four differences in self security, and three of three differences in peer affiliation favor the Black migrant student.

2. Overall, differences in the self-concept domain are significant at the seven- and ten-year-old levels among males and thirteen- and sixteen-year-old levels among females.

Summation

1. With the exceptions of the school affiliation factor in which both migrant groups outscore the nonmigrant groups and the family affiliation and self assertion factors in which no differences exist, the nonmigrant students evidence higher self-concept scores than former or current migrant students.

2. In the social confidence and social maturity factors, both current and former migrant students show dramatically depressed scores.

3. The greatest differences in the self-concept factors, both in terms of magnitude and number, occur among older students and center on the personal/social aspects of self-concept.

4. Differences between migrant and nonmigrant students increase with age suggest that a complex of socialization processes,

including the school, family, peers, and perceived authority begin to reflect a negative picture of the migrant student somewhere between kindergarten and second grade, and this negative feedback apparently increases in intensity with each additional year of schooling until by the fifth or sixth grade a much depressed self-concept profile characterizes the migrant student.

Social Domain

Nonmigrants versus Current Migrants

1. At the five-year-old level, nonmigrant males are rated as having more behavioral problems and as being more behaviorally disruptive while having a healthy personality. At all other age levels the negative factors are more characteristic of the current migrant students, whereas the positive factors are more prevalent among nonmigrant students.

2. Seven of seven differences in the socially insecure factor show current migrant students as being more insecure and eight of eight differences in the healthy personality factor favor the nonmigrants.

3. In three of three contrasts current migrants are presented as being least popular, whereas nonmigrants are most popular in five of five significant contrasts.

Nonmigrants versus Former Migrants

1. The differences are small but consistently tend to place nonmigrant students at an advantage.

2. Female nonmigrant students show a greater advantage over their former migrant peers than do males.

3. Former migrant students are rated by their teachers as being more behaviorally disruptive in five of five contrasts, whereas nonmigrant students are rated by teachers as having a healthy personality at every age level among females and at the thirteen-year-old level among males.

4. Five out of five differences in the most popular factor favor the nonmigrants over their former migrant peers.

Current Migrants versus Former Migrants

1. Current migrant students tend to be rated as socially insecure while former migrant students are more often rated behaviorally disruptive.

2. At the ten-year-old level both male and female former migrants have behavioral problems and are behaviorally disruptive.

White Migrants versus Black Migrants

1. White migrant males are rated consistently more socially insecure than Black migrant males.

2. At the ten-, thirteen-, and sixteen-year-old levels, Black migrant males are rated more behaviorally disruptive than White migrant males.

3. Two of three differences in the most popular factor favor White migrant students.

4. Differences among females are apparent in the behaviorally disruptive contrast at ages seven, ten, and thirteen.

5. At ages thirteen, five of five contrasts give the advantage to White students.

White Migrants versus Spanish-speaking Migrants

1. None of the White-Spanish contrasts among females are significant.

2. Among males at the ten-, thirteen-, and sixteen-year-old levels, more White migrants are rated as having behavioral problems. The same pattern is evident in males seven, ten, and sixteen year olds in the socially insecure contrasts.

3. White migrants are more often nominated as least popular and also most popular than their Spanish-speaking peers.

4. The most consistent differences appear in the healthy personality factor with five of five differences favoring Spanish-speaking migrants.

5. Overall, the differences between these two ethnic groups are minimal, particularly among females.

Black Migrants versus Spanish-speaking Migrants

1. Overall, Black migrants are rated as having more negative behavior characteristics and Spanish-speaking migrants as having more positive characteristics.

2. Black migrants are consistently rated as more behaviorally disruptive (nine of nine differences) and more Spanish-speaking migrants are rated as having a healthy personality, (five of six differences).

3. Substantial differences between these two ethnic groups tend to increase with age with the exception of the sixteen-year-old level.

Summation

1. Nonmigrant children are consistently rated by their teachers as having healthier personalities and being more popular than either their current or former migrant peers.

2. The differences between current and former migrant students in the six social domain factors are minimal with the exception of one interesting pattern. Current migrant students tend to be more frequently rated as socially insecure while former migrant students are more often rated as behaviorally disruptive and least popular.

3. Differences between White migrant and Black migrant students are most apparent in the socially insecure and disruptive factors.

4. More White migrants are rated as socially insecure, whereas more Black migrants are rated behaviorally disruptive.

5. In the differences between White and Spanish-speaking migrants, more White male students are rated as being sociallly insecure and behaviorally disruptive than Spanish-speaking male students.

6. Spanish-speaking migrants are more likely to be rated as having a healthy personality than both their White and Black migrant peers.

Growth Substudy

1. White current migrant males and females are consistently .2 to .4 standard deviations below the national norm on height for age.

2. Black current migrant males and females are taller than the national norm until they reach age seven, after which the advantage deteriorates rapidly, falling below norm at age sixteen.

3. Both White and Black current migrants of both sexes are .2 to .5 standard deviations overweight for height.

4. A comparison of Spanish-speaking migrants with the national norms indicates that these students are consistently .5 standard deviations or more below the norm with respect to height and .5 standard deviations above the norm on weight for height.

5. Overall, current migrants, and particularly White and Spanish-speaking migrants, show a common profile of malnourished children in affluent societies. This profile is characterized by low height for age and overweight for height stemming from a protein and vitamin poor diet rich in carbohydrates.

1. The "pull" phenomena are the most relevant factors affecting migration. These are conditions in the receiving state which attract or "pull" workers out of the home state. They include wage rates in the receiving state, local unemployment rates in the receiving state, the size of the harvest, changes in agricultural production, etc. (Chap. 6).

2. We have found a significant shift in the racial and ethnic composition of the migrant work force since 1968, at which point the migrant population was basically young and Black. Since then, these Blacks have advanced into unskilled and semi-skilled jobs; their positions as migrant farmworkers have been filled by a large influx of Mexican-Americans both from within the State of Florida and from Texas. (Chap. 2).

3. A particularly significant finding relates to the average number of children per worker which has increased from previous estimates of 1.7 to our current estimate of 2.74. This figure represents an average across groups, with significant differences among the various racial ethnic groups in terms of family size. (Chap. 2).

4. Our findings indicate significant differences in family size and structure as well as in worker characteristics between the Black and Mexican-American sub-groups, indicating the need to address these differences in migrant programs. (Chap. 2).

5. As we have found that the trend of crew membership (which facilitated contact with migrants through their crew leaders) is decreasing, this relatively easy connection between State programs and migrant workers is deteriorating. (Chap. 2).

6. The educational level for the migrant population as a whole predictably was found to be very low for all groups. There appears to be a strong correlation between level of education and family size with a significant decrease in number of years of education received and age of leaving school as family size increases. Significant differences were found to exist among the sub-groups of the population:

    - Blacks and Whites complete approximately three more years of education than Mexican-Americans.

    - Blacks and Whites stay in school approximately two years longer than Mexican-Americans.

- The educational attainment of women interviewed was approximately 1.5 years greater than of men interviewed. (Chap. 2).

7. There appears to be no significant difference between crew membership and non-crew membership in terms of the amount of education received by the workers. (Chap. 2).

8. With regards to age, the major significant finding is that the average age of migrant workers is 33.89 years; approximately 7 years younger than that reported in the ASPE Settling-Out Study. This points to indications that greater numbers of children in the earlier age groups can be expected with the concommitant higher level of demand for early education services. (Chap. 2).

9. There has been a significant shift away from crew membership since the Kleinert study which found that slightly over 82% of all migrants traveled with crews. According to our migrant worker survey, 45.04% of the workers now travel with crews; Blacks tend to be crew members, Whites do not. (Chap. 2).

10. The only group with any significant tendency to own property was the Mexican-American group of which 28.57% of those interviewed owned either a home, land, or a farm. (Chap. 2).

11. Regarding the location of owned property, it appears that the tendency for such property to be located in Florida increases somewhat as family size increases, indicating that families with greater numbers of children tend to have a more direct tie to the State of Florida than do smaller families. (Chap. 2).

12. The average age of entry into the labor force among migrants is 14.21 years, ranging from 13.75 years for Puerto Rican workers to 15.15 years for White workers. Workers with large families tend to begin working at a slightly earlier age. (Chap. 2)

13. The average number of years of work as a migrant laborer is 9.18 years, with Whites tending to spend fewer years as a migrant worker and Puerto Ricans spending the greatest number of years. For those females interviewed, more than two-thirds of their working lives was spent as a migrant worker; the figure was approximately 44% for males. (Chap. 2).

14. With regards to the reasons for going to the state where the most time was spent during the year, the major reason (for 40% of the workers) was that it was the only available work at the time. The second most important reason was that

wages were considered to be good in that state. Housing, health, food and welfare services seemed to have a low attractive power for migrant workers. The fact that the two major "pull" reasons are economic factors substantiates the use of the economic approach to predicting migratory movement. (Chap. 2).

15. Over 80% of the migrants interviewed expect to remain in migrant agriculture; the significantly greater proportion with this expectation are Mexican-Americans. Whites have a greater level of expectation of leaving the migrant agricultural field. (Chap. 2).

16. The major factors that will cause migrants to "settle-out" are job opportunities, particularly those outside of farming. (Chap. 2).

17. Almost 50% of those interviewed indicated that Florida was the state in which they would settle-out when they leave the Migrant Stream. Texas was second, Michigan third. Florida tended to be the predominant choice of both individuals with large families and of Spanish-speaking groups, indicating that additional emphasis in bilingual education will be necessary as individuals begin to leave the Migrant Stream. (Chap. 2).

18. Florida school districts report 4.10% of the migrant students being classified as handicapped; based on estimates of the national population, 10% of all students would be reported as having mental, physical or emotional handicaps. This would appear to be a severe underreporting of students with handicapped conditions, especially given the fact that the population is of the lower socioeconomic groups where handicapping conditions tend to be more prevalent. (Chap. 2).

19. Of those identified by the school districts as having handicaps, 88.5% are being served by the schools. However, based on the national estimate, only 26% of those students who are likely to have handicaps are currently being served. (Chap. 2).

20. Only 2 out of every 5 migrant students are being served by special programs in Florida. (Chap. 2).

21. Over the past five years, 6 times as many school districts have perceived an increase in enrollment as have perceived a decrease in entollment, and, for the next five-year period no school district expects a decrease in enrollment of migrant students. (Chap. 2).

22. In the ranking of the most critical problems facing migrant students in their districts, the school districts indicated that the most critical problem was reading; language was the second major problem area. While health was third in frequency of mention, in terms of intensity, this is the most intense problem that school districts face. (Chap. 2).

23. There has been (since 1960) a very significant increase in school enrollment levels in early child ood and secondary education. This has occurred as programs have been made more attractive and as parents have become more aware of their existence in the case of early childhood education. For secondary education, the reason appears to be an increased valuation placed on education by both parents and students. (Chap. 2).

24. The 1980 migrant farmworker population will look much the same as it does today, noting, however, the following significant trends.

    - The migrant farmworker population will become more predominantly Mexican-American.

    - In the schools, an increasing percentage of migrant students will also be Mexican-American.

    - The average age of workers will increase.

    - The average family size, especially in terms of numbers of children per worker will tend to rise. (Chap. 8).